20

IN ◯ ⎓⎓R⎓⎓ ⎓⎓R⎓⎓ ◯ OUT

C   C   C

R/12
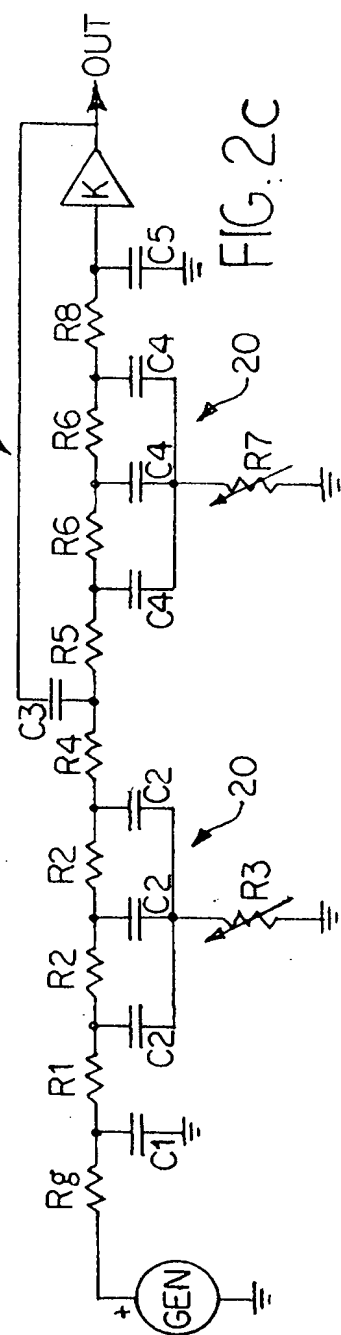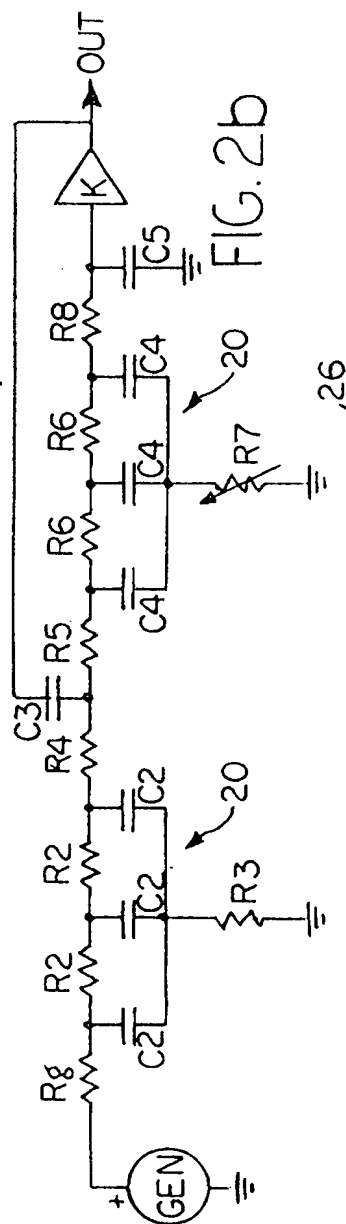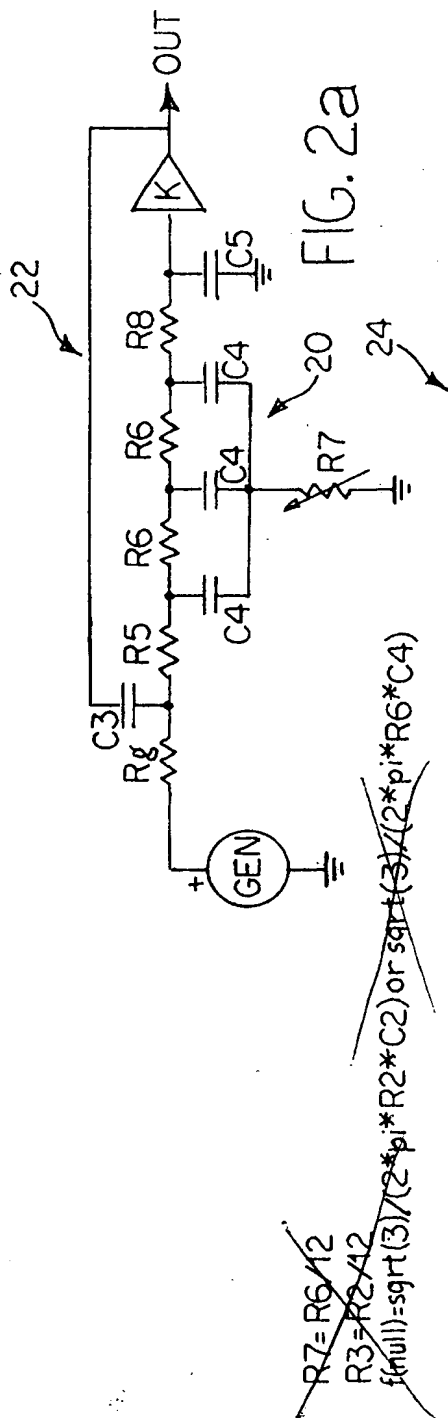
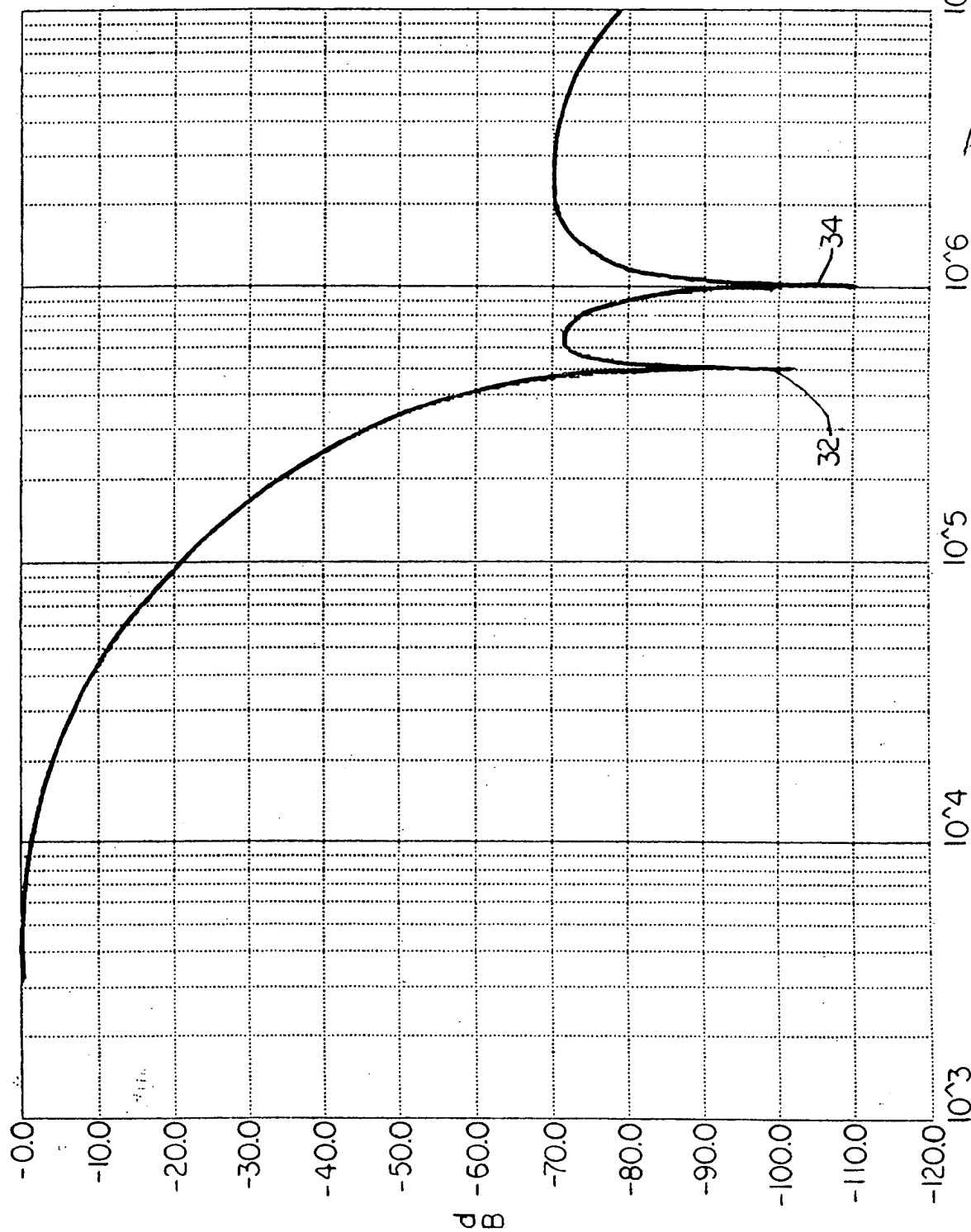$$G(S) = \frac{(RCs)^3 + 4*(RCs)^2 + 3RCs + 12}{(RCs)^3 + 16*(RCs)^2 + 39RCs + 12}$$

$f(null) = sqrt(3)/(2pi*RC)$

ISOLATED-INTEGRATOR BAND-REJECT FILTER

FIG. 1 (PRIOR ART)

FIG. 2a

FIG. 2b

FIG. 2c

R7= R6/12
R3= R2/42
f(null)=sqrt(3)/(2*pi*R2*C2) or sqrt(3)/(2*pi*R6*C4)

LOW-PASS SALLEN & KEY FILTERS W ISOLATED INTEGRATOR TRAPS

FIG.3

FREQUENCY (Hz)

LOWER-Z BP FILTERS
W 220pf caps

32

34

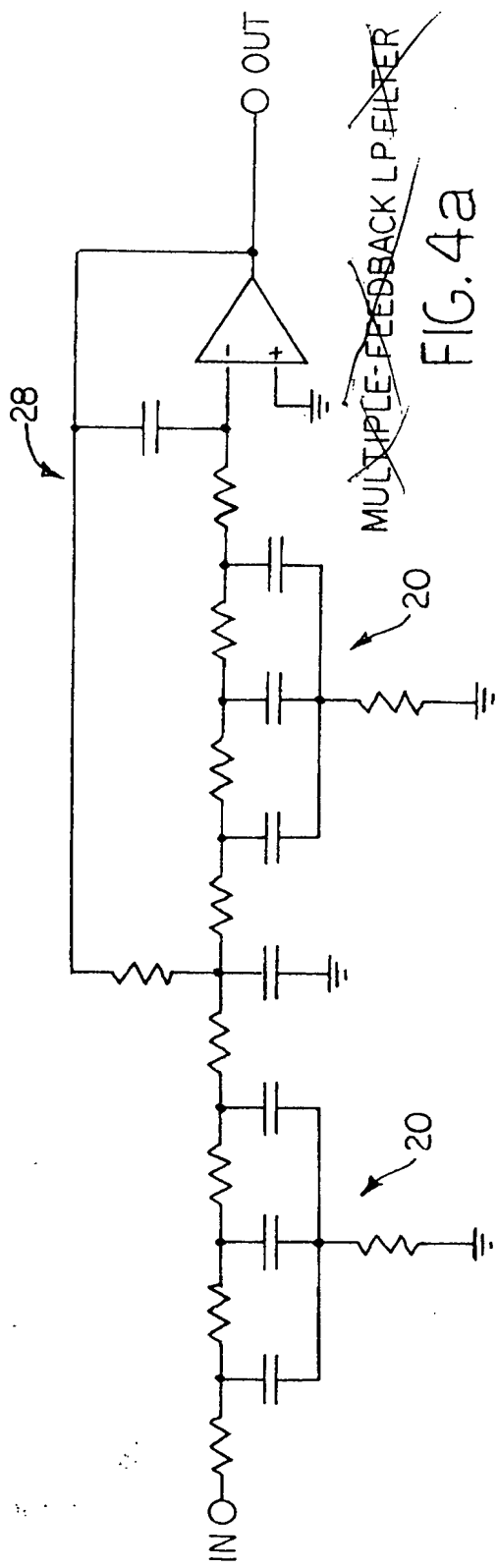—— db (all_vol)
····· db (all_vol)
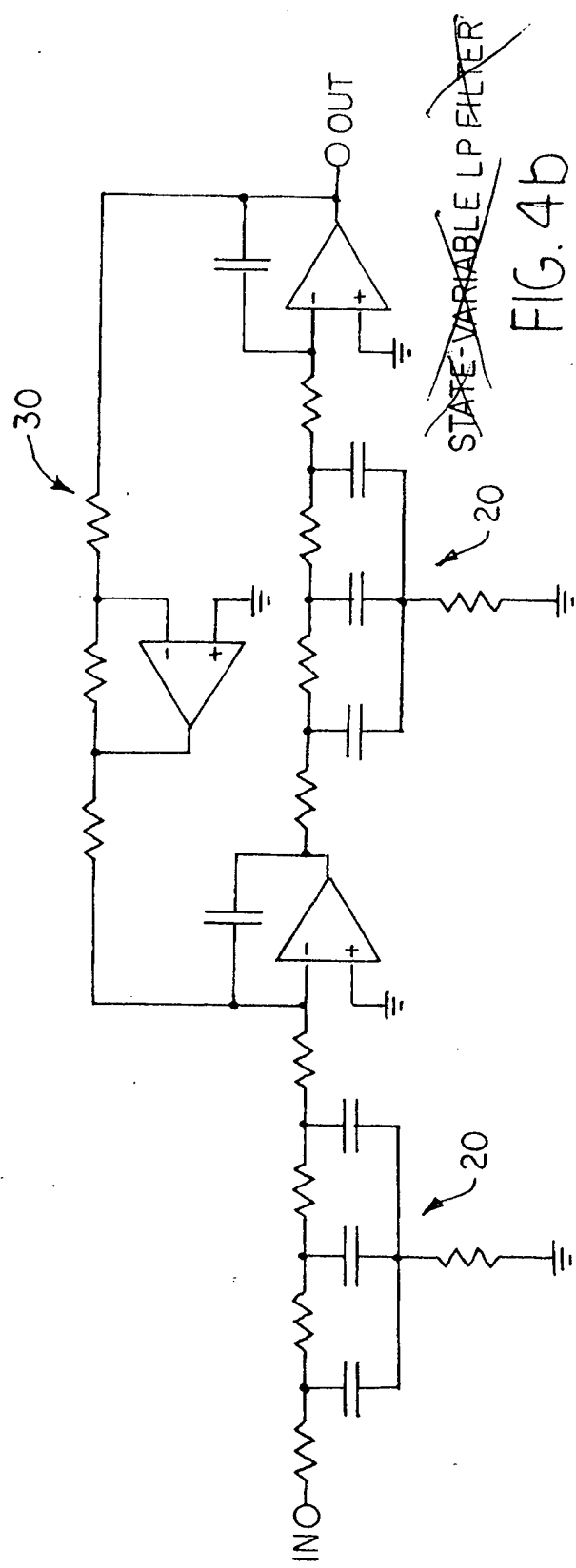
dB

MULTIPLE-FEEDBACK LP FILTER

FIG. 4a

STATE-VARIABLE LP FILTER

FIG. 4b
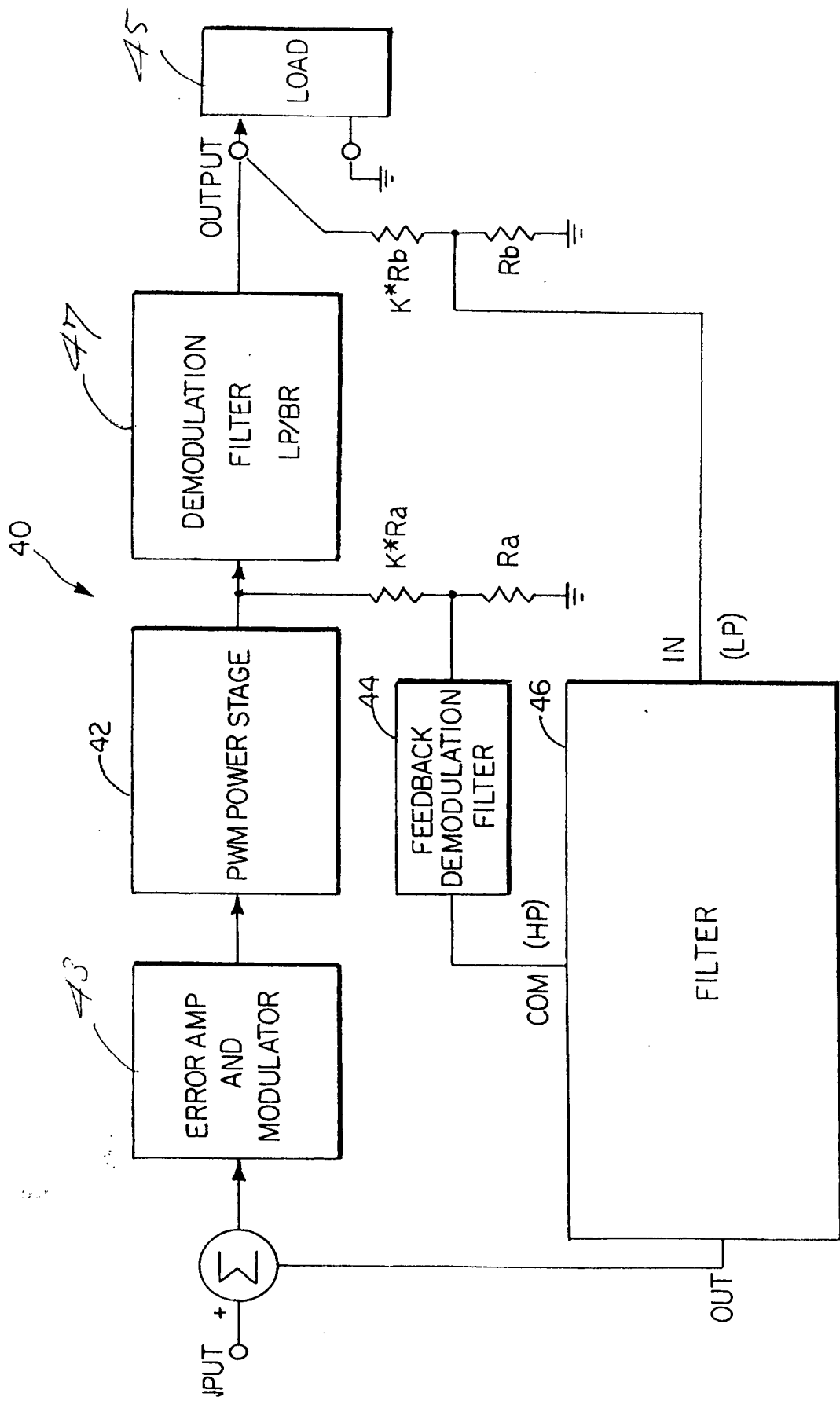
LOW-PASS FILTERS WITH ISOLATED-INTEGRATOR NOTCH FILTERS

FIG. 5